Title (en)
A HEARING DEVICE COMPRISING A NOISE REDUCTION SYSTEM

Title (de)
HÖRGERÄT MIT EINEM GERÄUSCHREDUZIERUNGSSYSTEM

Title (fr)
DISPOSITIF AUDITIF COMPRENANT UN SYSTÈME DE RÉDUCTION DU BRUIT

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EP 3694229 A1 20200812 (EN)

Application
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Abstract (en)
A hearing device, e.g. a hearing aid, is configured to be worn by a user at or in an ear or to be fully or partially implanted in the head at an ear of the user. The hearing device comprises a) an input unit for providing at least one electric input signal in a time frequency representation k, m, where k and m are frequency and time indices, respectively, and k represents a frequency channel, the at least one electric input signal being representative of sound and comprising target signal components and noise components; and b) a signal processor comprising b1) an SNR estimator for providing a target signal-to-noise ratio estimate for said at least one electric input signal in said time frequency representation; and b2) an SNR-to-gain converter for converting said target signal-to-noise ratio estimate to respective gain values in said time frequency representation. The signal processor comprises a neural network, wherein the weights of the neural network have been trained with a plurality of training signals. A method of operating a hearing aid is further disclosed. The invention may e.g. be used in audio devices, such as hearing aids, headsets, mobile telephones, etc., operating in noisy acoustic environments.

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